

**UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

SOLAS OLED LTD., v. DELL INC.,	<i>Plaintiff,</i> <i>Defendant.</i>	Case No. 6:19-cv-00514-ADA
SOLAS OLED LTD., v. GOOGLE LLC,	<i>Plaintiff,</i> <i>Defendant.</i>	Case No. 6:19-cv-00515-ADA
SOLAS OLED LTD., v. APPLE INC.,	<i>Plaintiff,</i> <i>Defendant.</i>	Case No. 6:19-cv-00537-ADA
SOLAS OLED LTD., v. HP INC.,	<i>Plaintiff,</i> <i>Defendant</i>	Case No. 6:19-cv-00631-ADA

SOLAS'S OPENING CLAIM CONSTRUCTION BRIEF¹

¹ The captioned cases are consolidated for claim construction briefing and hearing. Thus, Solas will file an identical copy of its claim construction papers in those cases.

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TABLE OF EXHIBITS AND ABBREVIATIONS

Ex²	Document Description	Abbreviation
1	Declaration of Richard A. Flasck in support of Solas's opening claim construction brief	Flasck. Decl.
2	U.S. Patent No. 6,072,450	'450 patent
3	U.S. Patent No. 7,447,338	'338 patent
4	U.S. Patent No. 7,573,068	'068 patent
5	U.S. Patent No. 7,499,042	'042 patent
6	U.S. Patent No. 7,663,615	'615 patent
7	Parties' joint revised list of terms/constructions served June 12, 2020	Joint Chart
8	The Authoritative Dictionary of IEEE Standards Terms (7th ed. 2000) ("IEEE Dictionary"), definitions of "drain," "source," select," and "substrate"	IEEE Dict.
9	Microsoft Computer Dictionary (3rd ed., 1997), definition of "signal" and 'scan line'	MS Dict.
10	McGraw-Hill Dictionary of Scientific and Technical Terms (4th ed., 1989), definitions of "data transmission line," "source," drain," and "selection circuit"	McGraw-Hill
11	Merriam-Webster Dictionary (avail. at www.merriam-webster.com , accessed May 2020), definitions of "select," "selection," "sequential," and "series."	Merriam-Webster
12	Dictionary.com (avail. at www.dictionary.com , accessed May 2020), definitions of "period," "section," "sequence," and "sequential"	Dictionary.com
13	Oxford Concise Dictionary (12th ed., 2011), definitions of "period" and "section"	Oxford Concise
14	Claim Construction Memorandum and Order from <i>Solas OLED Ltd. v. Samsung Display Co., Ltd.</i> , 2:19-CV-00152-JRG, Dkt. 99 (E.D. Tex. Apr. 17, 2020)	Samsung Markman
15	Claim Construction Order from <i>Solas OLED Ltd. v. LG Display Co., LG Elec., Inc., and Sony Corp.</i> , Dkt. 82, Case 6:19-cv-00236-ADA (W.D. Tex. June 9, 2020)	LG/Sony Markman
16	Parties' Joint Claim Construction Statement from <i>Solas OLED Ltd. v. LG Display Co., LG Elec., Inc., and Sony Corp.</i> , Dkt. 76, Case 6:19-cv-00236-ADA (W.D. Tex. May 1, 2020)	LG/Sony JCC

² All exhibits attached to the concurrently filed declaration of Philip X. Wang.

17	HP's proposed claim constructions, Case No. 6:19-cv-00631-ADA, served May 22, 2020	HP's Proposed Constructions
18	Solas's Disclosure of Asserted Claims and Infringement Contentions Against Samsung, Case No. 2:19-cv-00152-JRG (E.D. Texas), Oct. 7, 2019	Samsung Contentions
19	Apple's proposed terms for construction, Case No. 6:19-cv-00537-ADA, served Apr. 30, 2020	Apple's Proposed Terms
20	Apple's proposed claim constructions, Case No. 6:19-cv-00537-ADA, served May 22, 2020	Apple's Proposed Constructions
21	Excerpts of transcript of April 14, 2020, Telephonic Motion Hearing from <i>Solas v. Dell and Google</i> , Case Nos. 6:19-cv-00514-ADA, 6:19-cv-00515-ADA.	Motion Hearing Tr.
22	The New Oxford American Dictionary, Second Edition (2005)	New Oxford American Dictionary

I. INTRODUCTION

Plaintiff Solas OLED Ltd. (“Solas”) and Defendants Dell Inc., Google LLC, Apple Inc., and HP Inc., (collectively “Defendants”) offer not just competing proposals, but fundamentally different approaches to claim construction. The Federal Circuit has set forth straightforward rules to guide claim construction. For example, where claim terms have a plain and ordinary meaning in the field, that meaning almost always controls. And where described embodiments are narrower than the claims, features of embodiments should not be imported into the claims unless the patentee evinces a clear intent to limit claim scope. Solas’s proposals follow Federal Circuit precedent. They are also faithful to the full intrinsic record and reflect how a person of ordinary skill in the art (“POSITA”) would understand the terms.

Defendants’ proposals, on the other hand, reflect a different and erroneous approach to claim construction. Defendants ask this Court to recharacterize and burden clear terms with artificial and extraneous baggage but cannot point to any clear and unmistakable disclaimer. This invites reversible error. Many of their proposals are inconsistent with—and even *exclude*—embodiments taught in the specification. For other terms, Defendants’ proposals are inconsistent with the claim language itself. And across the board, Defendants’ proposed constructions lengthen and obfuscate the terms, making it harder for the jury to understand them.

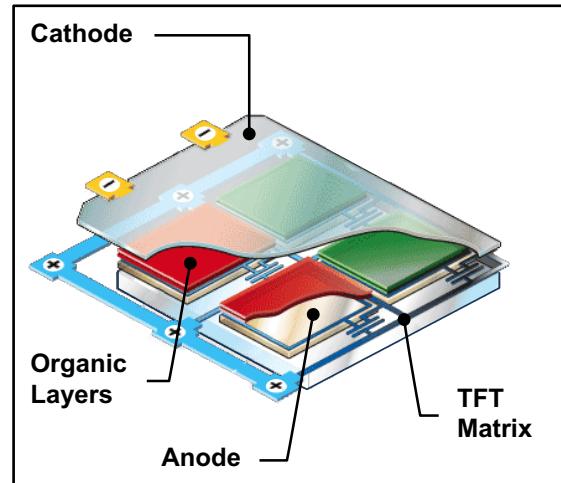
The parties’ divergent approaches are also reflected in their treatment of prior claim constructions. Five disputed terms were previously construed by this Court (in the LG/Sony case) or by Judge Gilstrap (in the Sony case). For all these terms, Solas proposes the Court’s constructions. In contrast, Defendants seek a departure from all those constructions—often by advancing the same proposals and arguments that considered and rejected before.

The Court should reject Defendants’ proposals and adopt Solas’s proposals.

II. BACKGROUND OF ASSERTED PATENTS

The asserted patents relate to display panels with light-emitting elements, such as organic electroluminescent display panels. A commonly used organic electroluminescent display technology is the organic light emitting diode, or OLED. OLED display panels are currently used in high-end mobile phones, watches, televisions, and other products from a number of manufacturers. Displays used in phones, watches, televisions, etc. contain a two-dimensional array of picture elements, commonly called pixels, that can each be controlled to produce a desired color and brightness of light. Together, these pixels form the desired image on the display. Each pixel is typically made up of a number of sub-pixels. By controlling the brightness of each sub-pixel, the brightness and color of an overall pixel can be controlled.

Unlike liquid crystal display technology, which uses a backlight, in OLEDs, each individual sub-pixel of the display directly emits light. OLEDs are current-controlled, meaning that the light emitted from each sub-pixel depends on the current that flows through the electroluminescent element in that sub-pixel. The highest quality OLED displays are “active matrix,” as shown in the exemplary figure. Active matrix means that each sub-pixel in the display has a circuit associated with it, commonly containing electronic components such as transistors and capacitors, which is responsible for sending the correct amount of current through the OLED and thus controlling the brightness of the sub-pixel.



The asserted patents generally relate to how drive circuits for active matrix OLEDs work. They address problems of concern to OLED displays and improve upon prior art approaches.

A. U.S. Patent No. 7,446,338 (“’338 Patent”)

The ’338 patent concerns display panels with light-emitting elements, including OLEDs. It shows an example sub-pixel active matrix driving circuit for in Figure 2. In this example circuit, the light-emitting element shown as the diode 20. The transistor 23 in this example is called the “driving transistor.” During the time that the sub-pixel is emitting light, a “driving current” passes through the driving transistor and is supplied to the diode. ’338 patent at 14:51–53. Periodically, the sub-pixel is selected to be written to by setting a voltage on the corresponding “scan line” X_i . *Id.* at 14:42–46. This voltage on the scan line turns the “switch transistor” 21 on. *Id.* 16:30–32. Turning the switch transistor on permits a “write current” supplied by the “signal line” Y_i to pass through the circuit, particularly through the driving transistor. *Id.* at 14:59–63.

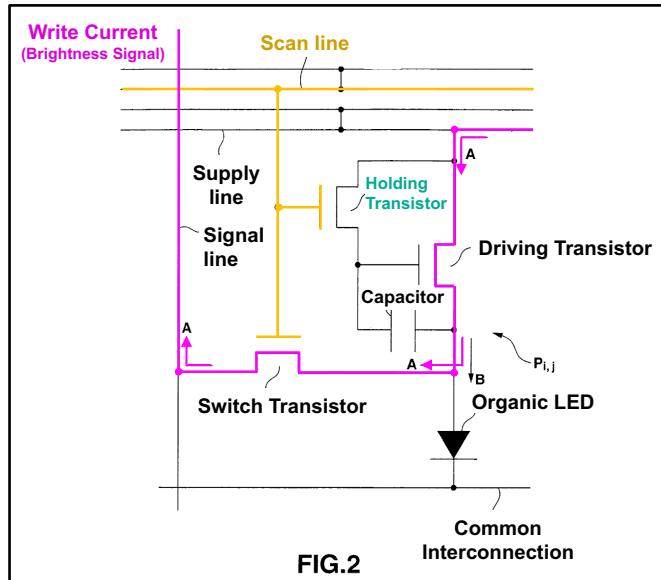


FIG.2

This flow of current causes a corresponding charge to form between the electrodes of the capacitor 24, and when the switch transistor is turned off, a current then flows through diode that depends on the charge on the capacitor, and in this example equals the write current. ’338 patent at 15:54–16:13. The patent specification describes a structure that implements a circuit of this type as a series of thin-film layers in the display panel, and the patent claims aspects of this structure.

B. U.S. Patent No. 7,573,068 (“’068 Patent”)

The ’068 patent concerns improved designs for transistor array substrates, containing an array of “driving transistors” and associated lines and interconnections necessary to their

operation. Such arrays of driving transistors are needed, for example, to drive active matrix displays utilizing organic electroluminescent elements. '068 patent at 1:24–36.

In prior art arrays, the materials, dimension, and arrangement of the transistor components and the lines and interconnections meant that the arrays suffered from undesirably large resistances and voltage drops, impairing the operation of driving transistors and the quality of the displayed image. The '068 patent teaches and claims improved designs for transistor arrays, with different arrangements of transistors, lines, interconnections, and electrodes, as well as with different dimensions or materials for such structures than those used in the prior art. '068 patent, Fig. 5.

C. U.S. Patent No. 7,499,042 (“’042 Patent”)

The ‘042 patent addresses problems with active matrix OLED displays. *See* ’042 patent at Background of the Invention. Specifically, the ’042 patent recognizes that the transistors of such can vary or degrade over time, leading to inconsistent pixel brightness *See id.* at 2:7–28 (“the gate threshold voltage changes with time, or differs from one transistor to another . . . That is, even when the gate voltage having the same level is applied to the driving TFTs of a plurality of pixels, the luminance of the organic EL element changes from one pixel to another. This produces variations in luminance on the display screen.”).

The ’042 patent addresses this problem by describing a display device with a plurality of selection scan lines, a plurality of current lines, and a data driving circuit. The driving circuit applies a reset voltage to the plurality of current lines and then supplies a designating current having a current value corresponding to an image signal. The pixel circuits then supply a driving current with a current value corresponding to the designating current which flows through the current lines. Importantly, the pixel circuits loads the designating current which flows through the current lines and stores a level of voltage converted in accordance with the current value of the

designating current. After the selection period is over, the pixel circuits shut off the designating current and supplies a driving current corresponding to the level of the voltage converted in accordance with the designating current.

D. U.S. Patent No. 7,663,615 (“615 Patent”)

The ’615 patent concerns driving circuitry for self-luminous displays that emit light due to the current flowing through pixel elements, such as displays utilizing organic electroluminescent or LED elements.’615 Background of the Invention. The current flowing through such devices is commonly controlled by a gate voltage on a drive transistor. But the relationship between the gate voltage and the current may change “depending on the usage time, the drive history and the like,” and in particular the minimum “threshold voltage” on the gate necessary to permit current flow may shift. Thus, “it becomes difficult to stably realize the light emission operation at the appropriate luminance gradation sequence in accordance with the display data for a long time.”

The ’615 patent provides structures and methods for driving the pixel circuits that solve problems in the prior art, including through a light emission drive circuit that can apply a current control type (or a current drive type) of light emission element emitting light at a predetermined luminance gradation sequence by supplying a current in accordance with the display data to plural display panels (pixel arrays). Abstract. Various embodiments are shown in the figures, including Fig. 15, which is “an example of the entire structure of a display unit.”

III. CLAIM CONSTRUCTION PRINCIPLES

The “claim construction inquiry . . . begins and ends in all cases with the actual words of the claim.” *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1324 (Fed. Cir. 2002). Indeed, “the claims themselves provide substantial guidance as to the meaning of [] terms.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005).

Thus, when conducting a claim construction inquiry, “district courts are not (and should not be) required to construe every limitation present in a patent’s asserted claims.” *O2 Micro Int’l v. Beyond Innovation Tech.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008). This is because claim construction is “not an obligatory exercise in redundancy.” *US Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997). Where a term is used in accordance with its plain meaning, the court should not replace it with different language. *Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1366-67 (Fed. Cir. 2012) (“we do not redefine words. Only the patentee can do that.”).

To the contrary, there is a “heavy presumption” that claim terms carry their “full ordinary and customary meaning, unless [the accused infringer] can show the patentee expressly relinquished claim scope.” *Epistar Corp. v. ITC*, 566 F.3d 1321, 1334 (Fed. Cir. 2009). Because that plain meaning “is the meaning that the term would have to a [POSITA] in question at the time of the invention,” construing claims often “involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips*, 415 F.3d at 1313-14.

“There are only two exceptions” in which claim terms are not given their full ordinary and customary meaning: “1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution.” *Thorner*, 669 F.3d at 1365. Without clear and unambiguous disclaimer or lexicography, courts “do not import limitations into claims from examples or embodiments appearing only in a patent’s written description, even when a specification describes very specific embodiments of the invention or even describes only a single embodiment.” *JVW Enters. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1335 (Fed. Cir. 2005). Similarly, a statement in patent does not limit the claims unless the statement is a “clear and unambiguous disavowal of claim scope.” *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1322–23 (Fed. Cir. 2003).

IV. SUMMARY OF ASSERTED PATENTS AND PARTIES

Five patents are asserted in the cases involving Google, Dell, Apple, and HP with overlapping patents and different patents against each Defendant. The '450 patent is asserted against Dell, google, and Apple, and does not have any disputed terms for construction. The '338 patent is asserted against Google and Apple, and was also construed by Judge Gilstrap in the Samsung EDTex case. The '068 patent is asserted against Apple and HP and was also construed by this Court in the LG/Sony case. Finally, the '042 and '615 patents are asserted against HP only and have not been previously construed. This is summarized in the following chart:

Cases	'450	'338	'068	'042	'615
<i>Solas v. Dell</i> (6:19-cv-00514)	✓				
<i>Solas v. Google</i> (6:19-cv-00515)	✓	✓			
<i>Solas v. Apple</i> (6:19-cv-00537)	✓	✓	✓		
<i>Solas v. HP</i> (6:19-cv-00631)			✓	✓	✓

V. DISPUTED TERMS FOR '338 PATENT

A. “transistor array substrate” ('338 patent claims 1, 4)

Solas's Proposed Construction	Defendants' Proposed Construction
layered structure upon which or within which a transistor array is fabricated	a layered structure <u>composed of a bottom insulating layer through a topmost layer on whose upper surface pixel electrodes are formed</u> , which contains an array of transistors

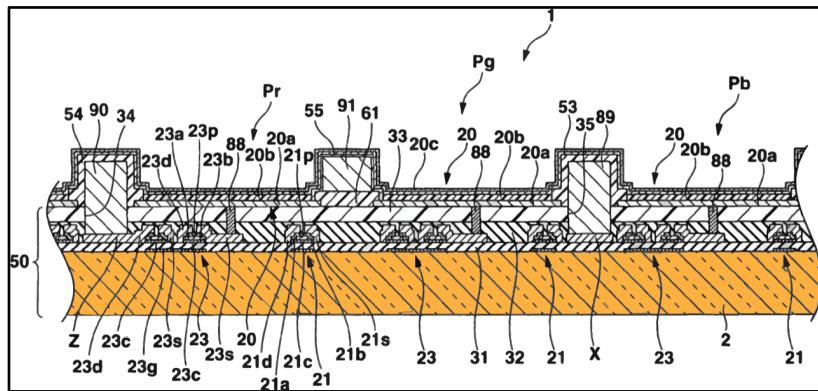
This term was construed two months ago by Judge Gilstrap in *Solas OLED Ltd. v. Samsung Display Co., Ltd.*, Case No. 2:19-cv-00152-JRG (E.D. Tex.). Samsung Markman (Ex. 15) at 8–15. Samsung Display Co., Ltd., an intervenor in the present cases, is a defendant in that Eastern District of Texas case. Samsung Display is also the supplier of the OLED panels used in the Apple and Google products accused under the ’338 patent in the present cases. Indeed, Solas’s initial infringement contentions in the *Solas v. Samsung* case accused the OLED panels that Samsung sells to Apple and Google for use in the products at issue in the present cases. Ex. 18 at 3–4.

For both this term and the term “project from a surface of the transistor array substrate,” Solas proposes that this Court adopt the same constructions that Judge Gilstrap held were the correct constructions. Samsung Claim Construction Order, Ex. 15 at 15, 18. Intervenor Samsung Display and its customers Apple and Google propose that this Court instead adopt the exact constructions that Samsung Display *unsuccessfully* proposed in the Eastern District case and that Judge Gilstrap *rejected*. Ex. 15 at 8, 15, 18. Samsung Display and its customers do not offer a new construction or new extrinsic evidence. They are not seeking to address some question of the meaning of the claims that is relevant to the products at issue in these cases but was not relevant to the products in the Eastern District case. Instead, they seek a “do-over,” asking this Court to reach a different decision on exactly the same issue that its sister court decided two months ago.

The Court should adopt Judge Gilstrap’s constructions, based upon the persuasive reasoning that is set forth in his opinion. Ex. 15 at 8–18. Indeed, this Court said it would “give a very high deference review of anything that Judge Gilstrap construes” and that changing a construction would face a “tough burden.” Motions Hearing Tr. at 28. Here, based on Defendants’ statements during the meet and confer process and its reliance on the same extrinsic evidence, they do not and cannot meet that burden. And of course, the Court should adopt Judge Gilstrap’s

constructions to avoid the same terms of the same patent being applied in two different ways to devices made by the same supplier, Samsung Display, in cases where that same supplier is a party.

Even putting that aside, Solas's proposed construction is correct. The plain meaning of a “transistor array substrate” is the substrate of or for a “transistor array.” The Authoritative Dictionary of IEEE Standards Terms, Seventh Edition (2000) provides a definition of “substrate” in the context of integrated circuits: “(1) (integrated circuit) The supporting material upon or within which an integrated circuit is fabricated or to which an integrated circuit is attached.” Ex. 8, at 1123. Defendants’ cited dictionary definition is consistent, stating that a substrate for an integrated circuit may have material placed on it (i.e., “deposited”) or within it (i.e., “inscribed”). Ex. 22, The New Oxford American Dictionary, Second Edition, at 1688, DEFS_CC_0039. Ex. 1, Flasck Decl. ¶¶ 59, 72–73. The ’338 patent uses word “substrate” consistently with these definitions, when it describes the bottom layer “2” in Figure 6 as an “insulating substrate” ’338 patent at 10:43:



Defendants' proposal departs from the plain meaning and incorporates specific features from one of the preferred embodiments disclosed in the specification. Specifically, it requires that the bottom layer of the transistor array substrate be "insulating," something that is not required by the plain meaning of the term. In particular, Defendants' dictionary definition states that a substrate could be a silicon wafer, i.e. a semiconductor. Ex. 22, at 1688, DEFS_CC_0039.

Defendants' may be relying on the statement in the specification that “[t]he layered structure from the insulating substrate **2** to the planarization film **33** is called a transistor array substrate **50.**” '338 patent at 10:45–47. This is simply a statement that the layered structure from **2** to **33** in Figure 6 is an *example* of a transistor array substrate. It is no more a definition of the term “transistor array substrate” than the statement “the document you are reading is a called an opening claim construction brief” defines or limits “opening claim construction brief.” The statement also clearly does not disclaim other types of “transistor array substrates” other than the type shown in Figure 6. Indeed, the specification is clear that it only describes a “best mode,” and that “the spirit and scope of the present invention are not limited to the following embodiments and illustrated examples.” *Id.* at 4:42–48.

Defendants appear to agree that this statement from column 10 is not lexicography, because they do not propose construing “transistor array substrate” as the layers up to a “planarization film.” Instead, they propose defining “transistor array substrate” in terms of something never mentioned in column 10, lines 42–47, namely in terms of what is formed on the “upper surface” of its “topmost layer.” There is no support in the specification, or elsewhere in the intrinsic or extrinsic record for *defining* the transistor array substrate by something else—having nothing directly to do with the transistor array—that is formed on top of it.

The specification, in describing the Figure 6 preferred embodiment, does describe electrodes as being “arrayed . . . on the upper surface of the planarization film **33**, i.e. the upper surface of the transistor array substrate **50.**” '338 patent at 11:50–52. Defendants may be relying on this language in support of their proposal. But the electrodes are not the only thing that the specification describes as being “on” the transistors array substrate. Indeed, the specification uses very similar language to describe the “insulating line 61,” saying that it is “formed on the surface

of the planarization film 33, i.e., on the surface of the transistor array substrate 50 between the [sub-pixels].” (Ex. 3, ’338 patent at 10:48–51.) If the sentence at 11:50–52 defines the transistor array substrate as the thing the electrodes are formed on, then sentence 10:48–51 defines them as the thing something else is formed on. Correctly understood, the specification is not providing multiple inconsistent *definitions* of transistor array substrate. Rather, it describes different structures of a preferred embodiment, which happen to be formed on the transistor array substrate.

Notably, both the sentence at 10:45–47 and the sentence at 11:50–52 form part of the description of a “bottom emission type” embodiment. ’338 patent at 10:42–47. The immediately following paragraphs of the specification describe a “top emission type” embodiment. *Id.* at 11:66–12:5. In this “top emission” embodiment, an additional “reflecting film having high conductivity and high visible light reflectance” is preferably formed between the sub-pixel electrode 20a and the planarization film 33. *Id.*; Ex. 1, Flasck Decl. ¶¶ 67–69. To the extent that Defendants argue that the sentences at 10:45–47 and 11:50–52 are definitional or constitute lexicography, then the sub-pixel electrodes 20a in this “top emission type” embodiment are not formed directly on the upper surface of layer 33, and their proposed construction (requiring that the electrodes be formed on the “upper surface” of the “topmost layer”) improperly excludes this “top emission type” embodiment from the claims. To the extent that Defendants argue that the “transistor array substrate” in the “top emission type” embodiment includes the reflecting film, then their construction is untethered from the statements in 10:45–47 and 11:50–52 stating that the planarization film 33 is the top layer of the transistor array substrate and not supported by anything in the record that supports limiting transistor array substrate in the manner it proposes.

B. “project from a surface of the transistor array substrate” ('338 patent claim 1)

Solas's Proposed Construction	Defendants' Proposed Construction
extend from an external surface of the transistor array substrate	extend above the upper surface of the transistor array substrate

As with the term “transistor array substrate,” this term was construed two months ago by Judge Gilstrap. Samsung Markman, Ex. 15 at 18. As above, this Court should also adopt the constructions that Judge Gilstrap held were correct, and not the constructions that intervenor Samsung Display *unsuccessfully* proposed in that case and that Judge Gilstrap *rejected*.

Judge Gilstrap’s construction requires that the interconnections extend beyond an “outer surface.” Defendants go beyond this to require that they extend beyond “the upper surface.” As Judge Gilstrap found in his claim construction opinion, “Defendants fail to justify limiting the dispute term to one particular outer surface rather than any outer surface.” Ex. 15 at 18.

Defendants’ attempt to narrow the claims specifically to “the upper surface” is without justification and contrary to law. This phrase appears in a limitation that describes a “plurality of interconnections” ('338 patent at 24:19–21), and in describing a preferred embodiment, the specification does explain that “the select interconnection **89** and feed interconnection **90** *project upward from the upper surface* of the planarization film **33**.” *Id.* at 11:39–41. But elsewhere the same specification explains that “the common interconnection **91** . . . is formed to . . . *project upward from the surface* of the planarization film **33**.” *Id.* at 10:54–58. Even in describing this preferred embodiment, the specification does not always specify that interconnections project from “the upper surface.” More importantly, the references in the specification to “the upper surface” are all in descriptions of preferred embodiments. Nothing in the specification or elsewhere in the intrinsic record limits the claimed “a surface” to a specific “the upper surface.” Likewise, a

POSITA reading these claims in the context of the patent would not understand the claims to limit “a surface” to “the upper surface.” Flasck Decl. ¶¶ 75–77.

VI. DISPUTED TERMS FOR '068 PATENT

In the *Solas v. LG/Sony* case, the Court addressed constructions for seven terms in claims 1 and 13 of the '068 patent. LG/Sony Markman at 2. In these cases, Defendants identified the same seven terms for construction and largely adopted LG's proposals. *See* Apple's Proposed Terms at 2; Apple's Proposed Constructions at 3. After the Court issued its Markman ruling in LG/Sony, Defendants dropped certain terms and adjusted its proposals. In contrast, Solas has maintained the same proposals that the Court adopted (or the parties agreed to) in the previous case. The Court should adopt Solas's proposals and reject Defendants' shifting and litigation-driven proposals.

A. “supply lines” ('068 patent claims 1, 13)

Solas's Proposed Construction	Defendants' Proposed Construction
conductive lines supplying current or voltage	conductive lines, <i>each</i> supplying a <i>driving</i> current or voltage <i>to a plurality of pixel circuits</i>

Solas's proposal was the parties' *agreed* construction in the LG case. *See* LG/Sony JCC at 1 (agreeing that “supply lines” in claims 1 and 13 of the '068 patent means “conductive lines supplying current or voltage”). Indeed, Solas's proposal is the plain meaning and should be adopted. Flasck Decl. ¶¶ 80–81. Even in this case, the parties agree “supply lines” means conductive lines supplying current or voltage. The only dispute is whether (1) *each* line must supply current or voltage to a *plurality of pixel circuits* and (2) whether a supply line must supply a “*driving*” current or voltage. Both requirements are unsupported. *Id.* ¶¶ 82–83.

First, there is no necessary one-to-many relationship between each supply line and a plurality of pixel circuits. The plain meaning of “supply line” includes a single line supplying a single pixel circuit. *Id.* ¶ 83. Second, neither the plain meaning nor intrinsic evidence require

supplying a “driving” current or voltage. As one example, the patent discusses supplying a “write current” or “current signal,” which is *not* characterized as a driving current. *Id.* ¶¶ 80–81; ’068 patent 16:17–21, 16:52–55, 19:26–30. Defendants’ construction is inconsistent with this example.

B. “formed on said plurality of supply lines along said plurality of supply lines” (’068 patent claim 1) / “connected to said plurality of supply lines along said plurality of supply lines” (’068 patent claim 13)

Solas’s Proposed Construction	Defendants’ Proposed Construction
[formed on / connected to] said plurality of supply lines <u>over the length or direction of</u> said plurality of supply lines	<u>stacked on or making multiple contacts with</u> said plurality of supply lines <u>over the length of each supply line</u>

The ’068 patent claims recite “a plurality of feed interconnections” which are “formed on” (claim 1) or “connected to” (claim 13) “said plurality of supply lines *along* said plurality of supply lines.” Solas’s proposal is the same construction that was extensively briefed, argued, and adopted by this Court in the LG case. *See* LG/Sony Markman at 2. Defendants’ proposal incorporates LG’s proposal but included additional, unsupported limitations. It is therefore even more incorrect. The Court should reject Defendants’ proposal and maintain its constructions from the LG case.

Solas’s proposal is the plain meaning of “along” and supported by the intrinsic and extrinsic evidence. Flasck Decl. ¶¶ 84–87. Dictionaries define “along” as over the length or direction of. *See* Merriam-Webster (“along: 1: in a line matching ***the length or direction of*** // walking *along* the river”); Dictionary.com (“along: 1 through, on, beside, over, ***or parallel to the length or direction of***; from one end to the other of: *to walk along a highway*.”). The claims use “along” in the same way. They recite a plurality of feed interconnections “formed on” or “connected to” a plurality of supply lines “along” the plurality of supply lines. A POSITA would not understand that interconnections are formed on or connected to the supply lines over the length or direction of the supply lines. Flasck Decl. ¶ 86. Nothing in the claims require the

interconnections to cover the entire length of or the supply lines. Finally, the specification supports Solas's construction by stating that feed interconnections and its common connections are provided "*in parallel to*" the supply lines. *See* '068 patent at 6:2–6, 23:1–6.

Defendants' proposal is fatally flawed for several reasons. Defendants take the simple terms "formed on" (in claim 1) or "connected to" (in claim 13) and redefine *both* as "stacked on or making multiple contacts with." But "formed on" and "connected to" have different meanings and it's improper to assign the same meaning to both. *See CAE Screenplates Inc. v. Heinrich Fiedler GmbH*, 224 F.3d 1308, 1317 (Fed. Cir. 2000) (presuming that "the use of these different terms in the claims connotes different meanings.") Further, neither term is equivalent to the awkward and confusing conjunctive: "stacked on or making multiple contacts with." That is not the plain meaning of anything and unsupported by the intrinsic evidence. Indeed, the phrase "making multiple contacts with" appears nowhere in patent.

Second, Defendants' construction requires the feed interconnections to be "stacked on or making multiple contacts with" supply lines "*over the length of each* supply line." This is particularly unjustified. Flasck Decl. ¶¶ 88–94. The claim describes a relationship between a plurality of interconnections and a plurality of supply lines. Nowhere does the claims or specification require the interconnections to extend over the length of every individual supply line.

C. "signal lines" ('068 patent claims 1, 13)

Solas's Proposed Construction	Defendants' Proposed Construction
conductive lines <u>supplying signals</u>	conductive lines <u>carrying data</u>

Again, Solas's proposal is the same construction that was briefed, argued, and adopted in the LG case. *See* LG/Sony Markman at 2. This Court analyzed "signal lines" and found it carries its plain meaning: "conductive lines supplying signals." *Id.* The '068 patent uses "signal lines" in

the same sense. Flasck Decl. ¶¶ 95–96. It describes conductive lines that supply signals where the signals can be currents or voltages. *See* '068 patent at 1:38–45, 16:14–21, Fig. 2; MS Dict. at 435 (“signal *n.* 1. Any electrical quantity, such as voltage, current, or frequency, that can be used to transmit information”). Defendants’ proposal changes “signals” to “carrying data” and is not the plain meaning. Further, nothing in the intrinsic evidence provides a special definition of “signal lines” or disclaimer that supports Defendants’ construction. Flasck Decl. ¶ 96.

D. “source” / “drain” ('068 patent claims 1, 5, 12, 13, 17)

Term	Solas’s Proposed Construction	Defendants’ Proposed Construction
“source”	Plain and ordinary meaning	source electrode
“drain”	Plain and ordinary meaning	drain electrode

The terms “source” and “drain” are common technical terms and readily understandable to a POSITA. Flasck Decl. ¶¶ 96–102. They do not require further construction. *See Mentor H/S, Inc. v. Med. Device All., Inc.*, 244 F.3d 1365, 1380 (Fed. Cir. 2001) (“the court properly instructed the jury that these terms should receive their ordinary meanings.”). Indeed, Defendants concede this by repeating the claim term itself into proposals.

Defendants’ proposals merely take the term source or drain and add the word “electrode.” This approach is improper for several reasons. First, it runs contrary to claim construction principles, which forbids rewriting claims by adding extraneous words. Second, it is unsupported by the intrinsic evidence. Although the '068 patent uses the term “gate electrode” it *never* once uses the terms “source electrode” or “gate electrode.” Third, Defendants’ proposal is unhelpful for the jury by adding another technical term. And the term “electrode” is itself ambiguous and may require further construction. Flasck Decl. ¶¶ 100–02.

VII. DISPUTED TERMS FOR '042 PATENT

A. “selection period” ('042 patent claim 1)

Solas's Proposed Construction	HP's Proposed Construction
time <u>period</u> during which a plurality of pixel circuits is <u>selected</u>	time <u>duration</u> in which a selected selection scan line is <u>kept active</u>

The “selection period” of claim 1 is described throughout the '042 patent in non-limiting language. For example, in regard to Figure 4, the specification explains that “a period in which the selection scan driver 5 … selects the selection scan line Xi in the ith row *is called a selection period* TSE of the ith row.” '042 patent at 9:22-27 (emphasis added). The specification also describes “selection scan line” comprises “a plurality of pixel circuits.” *Id.* at 2:46-48 (Brief Summary of Invention: “a plurality of pixel circuits which are connected to the plurality of selection scan lines”); at 3:17-20 (Brief Summary of Invention: “A display panel driving method according to still another aspect of the present invention comprises, a selection step of sequentially selecting a plurality of selection scan lines of a display panel comprising a plurality of pixel circuits”); (“In the second transistor 22 of each of the pixel circuits Di,1 to Di,n in the ith row, a gate 22 g is connected to the selection scan line Xi in the ith row”); Flasck Decl. ¶ 103. Solas's proposal captures the “selection period” described the patent specification.

HP's proposal of “time duration in which a selected selection scan line is kept active” improperly a confusing limitation “kept active” not found anywhere in the intrinsic evidence. The term “active” in this context is vague, ambiguous and would not be used by a POSITA in connection with the term “selection period.” Flasck Decl. ¶ 105. As just one fatal defect, it is entirely unclear whether HP asserts “active” is related to “activation” or alternatively an antonym to “passive.” *Id.* ¶ 105. Nor does the specification describe any “activation,” “deactivation” or

“passivation” associated with a scan line being “selected” or not selected. *Id.* The extrinsic evidence also rejects HP’s confusing and baseless addition to Solas’s proposal. Similar to the specification of the ‘042 patent, relevant dictionary definitions of “select” or “selection” do not refer to or require any notion of “keeping active.” Ex. 9.

Moreover, the intrinsic record, including Figure 4 and related description confirms that the “selection period” is a *period* (consistent with Solas’s proposal) not a *duration* (as HP’s proposal would require). Defendant’s proposed use of “duration” confuses, rather than elucidates the word “period,” since a duration simply specifies a difference between two times (e.g., T1-T2) without specifying the specific values of T1 and T2, or the relationship between T1 and T2 and the rest of the signal and voltage timings. For example, the 19th century and the 20th century are different time periods, even though they have the same duration (100 years). Flasck Decl. ¶ 104

To the extent HP argues that the “Von” voltage the specification describes that is applied to the selection scan line when selected somehow “keeps active” the selection scan line, this is undermined by HP’s proposal itself. HP proposes that “selection period” means the “time duration in which a *selected* selection scan line is kept active.” The specification describes the selection scan line is simply “selected” by applying the Von voltage. *See* ’042 Patent at 9:13-19 (“ON voltage VON (much higher than the reference voltage VSS) as a selection signal or a low-level OFF voltage VOFF (equal to or lower than the reference voltage VSS) as a non-selection signal, thereby sequentially selecting the selection scan lines X₁ to X_m.”) Thus, HP’s proposal, which adds the limitation “kept active” to being “selected”—besides being not supported and contradicted by the specification—is *at best* confusing and redundant. It should be rejected.

B. “sequentially selects said plurality of selection scan lines in each selection period” ('042 patent claim 1)

Solas's Proposed Construction	HP's Proposed Construction
Plain and ordinary meaning	selects said plurality of selection scan lines <u>one per each</u> of a plurality of <u>non-overlapping</u> selection periods

This phrase includes only words and phrases that have a plain and ordinary meaning to a POSITA. Flasck Decl. ¶ 106. Moreover, the intrinsic record does not depart from the plain and ordinary meaning of this phrase. *Id.* The parties' dispute largely boils down to the meaning of the word "sequentially." Merriam Webster's defines "sequential" as "following in sequence." Ex. 9 at 58. Synonyms are "consecutive" and "succeeding." *Id.* Dictionary.com similarly defines "sequence" as "the following of one thing after another; sequential" and "sequential" as "following; subsequent; consequent." Ex. 10. The term has a simple and consistent plain meaning.

HP's proposal removes the claim language "sequentially" and "in each selection period" and replaces those simple terms with limitations that go beyond the meaning of the language. HP purports to add "one per each of a plurality of non-overlapping selection periods." But there is **nothing** in the intrinsic record that *requires* selection of the "plurality of scan lines" to "one per each of a plurality of" selection periods. Moreover, while in some embodiments, certain selection periods are not described to overlap, the phrase "in each selection period" does not preclude any overlap under any circumstance. Flasck Decl. at ¶ 107.

To the extent an embodiment described in the specification may depict selection scan lines being selected "one per each" "non-overlapping" selection periods, such a disclosure would not limit the claims under too many Federal Circuit cases to name. Indeed, while not even necessary, the patent itself reminds the reader that features of the described embodiments are not requirements

of the present invention that limit the claims. *See* '042 patent at 4:10-15 (“Various technically preferred limitations are imposed on the following embodiments in order to, carry out the present invention. However, the scope of the invention is ***not limited*** to the embodiments and examples shown in the drawing.”) (emphasis added).

Finally, HP’s injection of additional limitations “one per each of a plurality of non-overlapping selection periods” makes little sense in view of the actual claim language being construed. As explained, “sequentially” has a plain and ordinary meaning not limited by the intrinsic evidence. The claim language injects the possibility of a “*plurality* of selection scan lines” being selected in each selection period and defeats HP’s limitation of one scan line being selected “per each of a plurality of non-overlapping selection periods.” The Court should reject HP’s proposal and find that the claim phrase carries its plain and ordinary meaning.

C. “designating current” ('042 patent claim 1)

Solas’s Proposed Construction	HP’s Proposed Construction
Plain and ordinary meaning, i.e., current designating a value corresponding to an image signal	current having a <u>specified current value</u> <u>that is held constant</u>

The term “designating current” has a plain and ordinary meaning, understood by a POSITA and the term is used consistent with that meaning in the intrinsic record. Flasck Decl. ¶ 108. The specification throughout, and also the claims, refers to the “designating current” as “having a current value corresponding to an image signal.” *See, e.g.*, '042 patent, Abstract, Claim 1.

HP’s proposal interjects the extraneous limitation, requiring that the designating current have “a specified current value that is held constant.” But there is nothing in the specification defining the designating current in this way. Indeed, the specification never describes the designating current as held constant during the first reset portion. *See* '042 patent at 11:54–59,

2:40–45. *See, e.g.*, Claim 1, '042 patent at 16:31–32: (“The current value of the tone designating current IDATA **decreases** as the luminance tone lowers.”) (emphasis added).

Moreover, even ignoring changes in the image signal, focusing only on the designating current for one selected scan line in one time period between when the reset voltage is applied and the end of the selection period, the specification shows the designating current level as an arc and not a “specified current value that is held constant.” The following portion of Fig. 9 and shows the current between TR and TSE **not** being “held constant”:

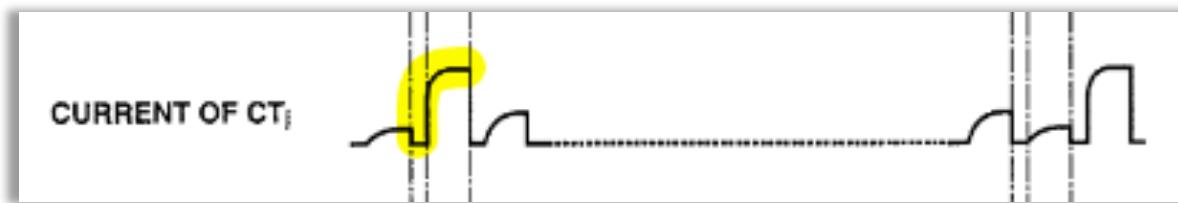


Fig. 9 (cropped); see also 16:6–10 (“In the selection period TSE of each row, the current source driver 3 controls the current terminals CT₁ to CT_n to generate the tone designating current IDATA having a current value corresponding to the image signal.”).

The specification further describes, for at least one more embodiment, that the designating current is held constant only during the second portion of the selection period. *See* '042 patent at 11:54–59, 2:40–45. This is consistent with the claim language, and **contradicts** HP’s requirement proposed construction. Flasck Decl. ¶ 109. HP’s proposal reads out a preferred embodiment. Such constructions are “rarely, if ever, correct.” *SanDisk Corp. v. Memorex Prods.*, 415 F.3d 1278, 1285–86 (Fed. Cir. 2005). HP’s extraneous limitations invite legal error and must be rejected. The term “designating current” should carry its plain and ordinary meaning, i.e., current designating a value corresponding to an image signal.

D. “current lines” (‘042 patent claim 1)

Solas’s Proposed Construction	HP’s Proposed Construction
Plain and ordinary meaning, i.e., conductive lines for carrying current	conductive lines, <u>each connected to a plurality of pixel circuits</u> and carrying current

Solas and HP largely agree that the term “current lines” as used in the asserted claims should be given its plain and ordinary meaning, which is “conductive lines for carrying current.” HP, however, seeks to interject additional limitation to the term by requiring also that the conductive lines “each [be] connected to a plurality of pixel circuits.” This additional restriction has no support in the intrinsic or extrinsic record.

The term “current lines” has a plain meaning in the field. And the ‘042 patent uses the term in accordance with that plain meaning. Flasck Decl. at ¶ 110. These terms use plain English words whose meaning is clear to one of skill in the art. *Interactive Gift Express, Inc. v. CompuServe Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001) (if the claim language is “clear on its face,” the court’s “consideration of the rest of the intrinsic evidence is restricted to determining if a deviation from the clear language of the claims is specified.”); *Hastings v. United States*, 78 Fed. Cl. 729, 733 (Fed. Cl. 2007) (“[I]f a claim element is clear on its face, or at least if the parties’ constructions would serve to obfuscate or warp its meaning, then the court may decline to construe the element”). To the extent the jury may need clarity regarding what a POSITA would understand the term to mean, it would mean “conductive lines for carrying current.” Flask Decl. at ¶ 110.

HP’s proposed additional limitations are unsupported by the specification, which for example, describes that “a plurality of pixel circuits [] are connected to … the plurality of current lines.” ‘042 patent, Abstract. The specification does not require that each ***individual*** conductive line must be connected to a plurality of pixel circuits. Flask Decl. ¶ 112. Even if some embodiments

had this condition, it would not limit the claims under Federal Circuit law and the patentee's own caveat that features of embodiments do not limit the claims. = '042 patent at 4:10-15.

Finally, it is unnecessary to include "pixel circuits" as part of the construction of "current lines." Claim 1 already specifies that the claimed configuration is limited to a device having current lines connected to pixel circuits (reciting "a plurality of pixel circuits which are connected to said plurality of selection scan lines and said plurality of current lines"). Thus, only devices having pixel circuits and current lines are claimed. HP's proposed construction requiring the conductive lines to be connected to pixel circuits is confusing and at best superfluous.

VIII. DISPUTED TERMS FOR '615 PATENT

For claim 11 of the '615 patent, HP originally proposed ***ten*** terms for construction and asserted that ***six*** terms were indefinite. *See* HP's Proposed Constructions at 2. Perhaps recognizing this was untenable, HP dropped most of its proposals. Regardless, HP fares no better on the remaining disputes. It's litigation-driven proposals should be rejected.

A. "the operation" ('068 patent claim 11)

Solas's Proposed Construction	HP's Proposed Construction
Plain and ordinary meaning, not indefinite. Within the claim phrase "a drive voltage for making the light emission control section perform the operation," the term "the operation" refers to "generating a light emission drive current having a predetermined current value in accordance with the electric charges accumulated in the electric charge accumulating section and supplying the light emission drive current to the light emission element."	Indefinite

Claim 11 recites "a light emission control section" followed by a detailed description and later recites "making *the* light emission control section perform *the operation*":

accordance with display data, a light emission control section for generating a light emission drive current having a predetermined current value in accordance with the electric charges accumulated in the electric charge accumulating section and supplying the light emission drive current to the light emission element, a writing control section for controlling a supplying state of the electric charges based on the gradation sequence signal to the electric charge accumulating section, and a voltage control section for controlling a drive voltage for making the light emission control section perform the operation, respectively;

A POSITA would clearly understand “the operation” of the light emission control section to refer to earlier recitation of what the light emission control section does: “generating a light emission drive current . . . and supplying the light emission drive current to the light emission element.” Flasck Decl. ¶¶ 113–14. This is apparent from the claim language itself and further supported by the specification. *Id.* ¶¶ 115–16 (citing ’615 patent at Summary of the Invention, Figs. 2–4B, 10–14B and associated written description).

HP’s entire indefiniteness argument is that “the operation” lacks antecedent basis. This fails for a simple reason—the Federal Circuit has repeatedly held that a lack of antecedent basis does not render a claim indefinite so long as here the term has a “reasonably ascertainable meaning,” which “must be decided *in context*.” *Energizer Holdings, Inc. v. Int’l Trade Comm’n*, 435 F.3d 1366, 1370 (Fed. Cir. 2006) (emphasis added).³ And here, the meaning of “the operation” is readily and easily ascertainable. It refers to the *operation performed* by the light emission control section and *can only* be the generating and supplying functions previously described.

³ See also *Microprocessor Enhancement v. TI*, 520 F.3d 1367, 1376 (Fed. Cir. 2008) (noting the “well-settled rule that claims are not necessarily invalid for a lack of antecedent basis”); *In re Skvorecz*, 580 F.3d 1262, 1269 (Fed. Cir. 2009) (quoting the MPEP: “Obviously, . . . the failure to provide explicit antecedent basis for terms does not always render a claim indefinite.”)

In its extrinsic evidence disclosures, HP argues that the specification describes different types of operations, such as a “drive control operation,” “precharge operation,” “writing operation,” and “light emission operation,” and therefore it would be “impossible” for a POSITA to determine which of these “the operation” refers to. This is absurd. That the specification mentions other types of operations does not render the term indefinite. It is clear from the claim language that “*the operation*” is not generically referring to just any operation mentioned in the patent, but rather is specifically to the operation of the light emission control section. This is the only reasonable reading of the claim. *See, e.g., In re Downing*, 754 F. App’x 988, 996 (Fed. Cir. 2018) (holding that the term “the end user” was not indefinite where its meaning was clear from the surrounding claim language; “While the specification discloses many different end users, [] claim 1’s recitation of one end user could only refer to the end user using the product.”).

Solas does not understand HP to contend that the other instances of “the operation” in claim 11 to be indefinite. Indeed, they are not. In the second and third instances, “the operation” is used as noun adjuncts and part of longer phrases: “*the operation* state of the writing control sections of the display pixels” and “*the operation* state of the voltage control sections of the display pixels.” A POSITA would understand the meanings of these claim phrases based on the phrases themselves and surrounding claim language. Flasck Decl. ¶¶ 115–16.

B. “precharge voltage” (’615 patent claim 11)

Solas’s Proposed Construction	HP’s Proposed Construction
Plain and ordinary meaning	Indefinite

The term “precharge voltage” is not indefinite. Claim 11 itself explains what a precharge voltage is, stating “the data driver applies a *precharge voltage* exceeding a threshold value of the drive transistor to the data line, and the light emission drive circuit applies the *precharge voltage*

applied to the data line to the electric charge accumulating section via the writing control section.” Thus, the claim language teaches that the precharge voltage (a) exceeds a threshold value of the drive transistor, (b) is applied by the data driver to the data line, and (c) is applied by the light emission drive circuit to the electric charge accumulation section. Flasck Decl. ¶¶ 117–19.

The specification also provides additional information about the function, magnitude, and timing of the precharge voltage, which would further inform a POSITA’s understanding of the meaning and scope of the term. *Id.* (citing ’615 patent at 7:28–38, 7:58–61, 8:30–32, Fig. 2, Fig. 13). Based on these teachings, it cannot be said that “precharge voltage” is indefinite. HP does not and cannot prove indefiniteness by clear and convincing evidence. To the extent HP maintains and articulates its indefiniteness position, Solas will respond.

C. “writing control section” (’615 patent claim 11)

Solas’s Proposed Construction	HP’s Proposed Construction
Plain and ordinary meaning, i.e., circuit section that controls writing	a transistor that controls the writing of both the gradation sequence signal and the precharge voltage from a data line to the charge accumulating section

The phrase “writing control section” is composed of ordinary technical words and has a plain meaning in view of the intrinsic evidence. That meaning is circuit section that controls writing. Flasck Decl. ¶¶ 120–22. This follows from the claim language itself. Claim 11 recites a “light emission drive circuit” having four recited sections: (1) “an electric change accumulating section” (2) “a light emission control section,” (3) “a writing control section,” and (4) “a voltage control section.” Each of these “sections” refer back to the light emission drive circuit and are sections of *that* drive circuit. Thus, the “writing control section” is the section of the light emission drive circuit that controls writing. And that is how the claim describes “a writing control section”:

it controls writing by “controlling a supplying state of the electric charges based on the gradation sequence signal to the electric charge accumulating section.”

HP’s proposed construction is flawed for multiple reasons. First, it proposes to add the functional requirement of “controls the writing of both the gradation sequence signal and the precharge voltage from a data line to the charge accumulating section.” But claim 11 already recites that the writing control section is “for controlling a supplying state of the electric charges based on the gradation sequence signal to the electric charge accumulating section.” That is the only requirement of the writing control section and already a claim requirement. HP’s attempt to manufacture additional functional requirements is improper and incorrect.

Second, HP’s proposal is too limiting. A POSITA would understand that the writing control section may comprise writing circuitry such as a transistor. Flasck Decl. ¶; ’615 patent at Fig. 1, 17:1–62. But that circuitry is not limited to a single transistor (as HP may imply), much less one “controls the writing of **both** the gradation sequence signal and the precharge voltage from a data line to the charge accumulating section.” Nowhere does the applicant redefine or disclaim the meaning of “writing control section” in such a way. Flasck Decl. ¶¶ 122–23.

D. “data lines” (’615 patent claim 11)

Solas’s Proposed Construction	HP’s Proposed Construction
Plain and ordinary meaning, i.e., conductive lines for supplying information	conductive lines, each connected to and carrying data to a plurality of light emission drive circuits

“Data lines” is a well-known term of art with a plain meaning: conductive lines for supplying information. Flasck Decl. ¶¶ 124–25. For example, the McGraw-Hill Technical Dictionary defines “data transmission line” as a “system of electrical **conductors** . . . used to send **information** from one place to another.” McGraw-Hill at 490 (emphasis added). The ’615 patent

uses “data lines” more than 80 times in accordance with the plain meaning. For example, the patent teaches that gradation sequence signals and a precharge voltage can be applied to the data lines. *See* ’615 patent at 5:49–50 (“a data driver . . . supplies a gradation sequence signal to the data line”); Fig. 1 and 17:5–16 (DL in Fig. 1 is a data line). This supports Solas’s construction because the gradation sequence signal and precharge voltage convey information. Thus, the patent uses “data lines” in the ordinary sense, i.e., conductive lines for supplying information.

HP apparently concedes that “data lines” has a plain meaning by including both words “data” and “lines” in its proposal. Indeed, HP’s would transform a two-word term into a 16-word phrase that includes the same two words. It is confusing and will not assist the jury, and should be rejected for this reason alone. HP’s proposal is also wrong because it imposes additional limitations beyond the plain meaning or intrinsic evidence. For example HP’s requirement of data lines being “***each*** connected to . . . a plurality of light emission drive circuits” is unsupported. The specification does not require each individual line to be connected to and carrying data to a plurality of light emission drive circuits. HP purports to require a one-to-many relationship between data lines and a light emission drive circuit. But this is not the plain meaning of data lines, and there is no lexicography or disclaimer that supports HP’s construction. Flasck Decl. ¶ 125.

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CERTIFICATE OF SERVICE

I certify that on June 25, 2020, 2020, all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system pursuant to Local Rule CV-5(a)(3)(A).

/s/ *Philip X. Wang*
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